# Historical Roots of Bioterrorism and Implications for the Future

## Satellite Conference Wednesday, April 27, 2005 • 1:30-3:00 p.m. (Central Time)

2:30-4:00 p.m. (Eastern Time) • 12:30-2:00 p.m. (Mountain Time) • 11:30 a.m.-1:00 p.m. (Pacific Time)

#### Faculty:

Aubrey J. Hough, Jr., MD
Distinguished Professor of Pathology
Associate Dean for Translational Research and Special Programs
University of Arkansas for Medical Services
Little Rock, Arkansas

### **Program Objectives:**

- 1. Become familiar with the historical context of bioterrorism.
- 2. Learn the basic classification and organization of bioterrorism organisms by class.
- 3. Become familiar with emerging diseases which are potential bioterrorism threats.

#### Conference Details:

<u>Target Audience</u>: Public health professionals and their partners with whom they will need to communicate in a public health emergency. <u>CEUs</u>: No CEU's awarded for this program.

Registration: www.adph.org/alphtn Cost: No cost to view
Satellite Technical Information: This program will be a live satellite
broadcast on both Ku & C bands. You will need a satellite downlink
system to view this program.

Webcast Information: This program will be available as an on-demand webcast approximately two days after the live satellite broadcast. To access this webcast, www.adph.org/alphtn (click On-Demand Webcasts).

<u>Conference Materials</u>: Posted on website approximately one week before the program.

Questions: alphtn@adph.state.al.us or 334-206-5618.

If you have questions that you want addressed during the conference, you may fax or email those questions and a response will be given during the program.

Email: alphtn@adph.state.al.us

Fax: 334-206-5640

The South Central Center for Public Health Preparedness is a partnership of the state health departments in Alabama, Arkansas, Louisiana and Mississippi and the Schools of Public Health at UAB, UAMS and Tulane University with funding from the CDC.

n historical review of bioterrorism begins with the Sumerian tablets around 3000 BC that relate knowledge of contaminated objects leading to pestilence. Over 2,000 years later, the earliest recorded use of a definite bioweapon occurred when the Assyrians poisoned enemy wells with rye ergot - a fungal toxin. China records from Han Dynasty (206 BC-220 AD) indicate numerous formulae for generating poisonous smoke was used on their enemies. The September 11<sup>th</sup> attacks and the subsequent anthrax letters have focused renewed attention on modern day terrorism involving chemical, biological, radiological, or nuclear weapons.

"Emerging" refers to newly discovered infectious diseases or old ones that have rebounded, turned up in new places or become drug resistant such as malaria, AIDS, tuberculosis, yellow fever, mad cow disease and West Nile encephalitis. Now, anthrax and other potential bioterrorism agents including smallpox, botulism, and Q fever have been added to the ranks of emerging infectious diseases.

Preparation is the best response to biologic terrorism and governmental agencies, health departments, and the Centers for Disease Control and Prevention have identified the most likely agents to be used in a biologic attack and they have plans in place to address such attacks. These plans emphasize the important role of frontline medical providers in recognizing and reporting suspected biologic and chemical attacks.

Biologic weapons are likely to be used in covert rather than overt attacks. Symptoms and signs of disease would have a delayed presentation, depending on the incubation period of the organism and the clinical syndrome. Covert attacks will be detected only if health care providers are vigilant and trained to recognize infections with potential bioterrorism organisms.